WE CLAIM:

1. A modem for a communications network, comprising:

a transceiver;

a first interface coupled to said transceiver and adapted to couple to a first communications terminal; and

a second interface coupled to said transceiver and adapted to couple to a network node, said second interface adapted to couple to both a first master communication loop and to a second shared communications loop, said second shared communications loop adapted to serve a second communications terminal.

2. The modem as specified in Claim 1 wherein said second communications terminal is physically located remote from said first communications terminal.

3. The modem as specified in Claim 1 wherein said transceiver exchanges communication information in a format compatible with ADSL standards.

4. The modem as specified in Claim 3 wherein said first communications terminal exchanges communication information over both said first master communication loop via said first interface and over said second shared communication loop via said second interface in a format compatible ADSL standards.

5. The modem as specified in Claim 4 wherein said second communications terminal is also adapted to exchange communication information in a format compatible with ADSL standards, wherein said modem transceiver is adapted to exchange communication information over said shared communication loop while said second terminal exchanges communication information over said shared communication loop.

6. The modem as specified in Claim 1 wherein said transceiver is adapted to simultaneously communicate information over both said master communication loop and said shared communication loop with a remote central office (CO).

7. The modem as specified in Claim 1 wherein said transceiver is adapted to share said shared communication loop using a technique chosen form the group consisting of: time division, frequency division, and code division.

8. The modem as specified in Claim 1 wherein said transceiver is adapted to share said shared communications loop for only received downstream communication information.

9. The modem as specified in Claim 1 wherein said transceiver is adapted to share said shared communications loop for both upstream and downstream communication information.

10. The modem as specified in Claim 1 wherein both said master communication loop and said second shared communication loop each comprise a twisted pair of conductors.

11. The modem as specified in Claim 3 wherein said second interface is also adapted to communicate voice information over said master communication loop and has a splitter separating said ADSL communication information from said voice information.

12. A communication network, comprising:

a first modem adapted to serve a first communications terminal;

a second modem adapted to serve a second communications terminal; and

a network node coupled to said first modem via a master communication loop and to said second modem via a shared communication loop, wherein said first modem is also coupled to said network node via said shared communication loop.

13. The communication network as specified in Claim 12 wherein said first modem exchanges communication information compatible with ADSL standards.

14. The communication network as specified in Claim 13 wherein said first modem is adapted to communicate information simultaneously over both said master communication loop and said shared communication loop as an integrated communication having a higher bandwidth than that available over said master communication loop.

15. The communication network as specified in Claim 14 wherein said first modem is adapted to also communicate voice communications over said master communication loop, said first modem having a splitter separating said ADSL communication information from said voice communications.

16. The communication network as specified in Claim 11 wherein said first modem is adapted to only receive downstream communications over said shared communication loop.

17. The communication network as specified in Claim 16 wherein said first modem is adapted to exchange both upstream and downstream communications over said shared communication loop.

18. The communication network as specified in Claim 12 wherein both said master loop and said shared loop each comprises a twisted pair of conductors.

19. A method of increasing a bandwidth of a communications network, comprising:

a first modem adapted to serve a first communications terminal;

a second modem adapted to serve a second communications terminal;

a network node coupled to said first modem via a master communication loop and to said second modem via a shared communication loop, wherein said first modem is also coupled to said network node via said shared communication loop;

comprising the step of:

simultaneously communicating information between said first terminal and said network node over both said master communication loop and said shared communication loop serving said second terminal.

20. The method as specified in Claim 19 wherein said information is compatible with ADSL standards.